INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

SHEET 1 of 1

, 4-b	10,705,235	
Filing Date	November 10, 2003	
First Named Inventor	Hideki Kuwajima	
Art Unit	2653	
Examiner Name	George J. Letscher	
Attorney Docket No.	YAO-4337US4	

U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No.1	Document Number Number - Kind Code ^{2 (if known)}	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevan Figures Appear
AL		US-6,046,884	04/04/2000	Crane	
Af		US-5,856,896	01/05/1999	Berg et al.	
A.		US-6,118,637	09/12/2000	Wright et al.	
AL		US-6,078,473	06/20/2000	Crane et al.	
AL		US-6,297,936	10/02/2001	Kant et al.	
A.		US-6,061,208	05/09/2000	Hattori	
DA		US-5,243,482	09/07/1993	Yamaguchi et al.	
AL		US-6,327,120	12/04/2001	Koganezawa et al.	
ALL.		U5-6,038,104	03/14/2000	Sato et al.	
74-		US-	1		
		US-			•
		US-			
		US-			·
		US-	<u> </u>		
		US-			

	FOREIGN PATENT DOCUMENTS							
		Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines, Where Relevant			
Examiner Initials*	Cite No. ¹	Country Code ³ - Number ⁴ - Kind Code ^{5 (If Instern)}	Publication Date (MM-DD-YYYY)	Applicant of Cited Document	Passages or Relevant Figures Appear	T⁵		
NF.		JP3-097174 (with English Abstract)	04/23/1991	Fujitsu, Ltd.				
XX		JP6-150596 (with English Abstract)	05/31/1994	Toshiba Corp.				

Examiner Date Signature Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Applicant's unique citation designation number (optional).

See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

Enter Office that issued the document, by the two-letter code (WIPO Standard St.3).

For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

⁶AppRcant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for Form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

SHEET 1 of 2

Complete If Known				
Application Number	-To Do Assignat 10 705, 235			
Fiting Date	Herewith			
First Named Inventor	Hidebi Kuwajima, et al.			
Art Unit	Total Assigned 2653			
Examiner Name	For Destacional Let School			
Attorney Docket No.	YAO-4337US4			

	U.S. PATENT DOCUMENTS					
	_	Document Number			Pages, Columns, Lines, Where	
Examiner Initials	Ote No. ¹	Number - Kind Code ^{2 (If known)}	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Relevant Passages or Relevant Figures Appear	
XX		US-5,898,544	04-27-1999	Krinke, et al.		
		US-				
		US-				
		US-				
		US-				
		US-			 	
		US-				
		US-			†	
		US-				
		US-				
		US-			 	
		US-			 	
		US-			 	

	FOREIGN PATENT DOCUMENTS						
		Foreign Patent Document		Name of Patentee or	Pages, Columns, Unes, Where Relevant		
Examiner Cite Indials No.	No.1	Country Code ³ - Number ⁴ - Kind Code ^{3 (Flavor)}	Publication Date (MM-DD-YYYY)	Applicant of Cited. Document	Passages or Relevant Figures Appear	76	
25		JP 5-47126	02-26-1993	Fujitsu, Ltd.		×	
Ho		JP 9-265738	10-07-1997	Hitachl, Ltd.		Ø	
X		JP 10-134534	05-22-1998	Hitachl, Ltd.		Ø	
AA		JP 10-269732	10-09-1998	NEC Corp.		Ø	
#5_		JP 10-293979	11-04-1998	Fujitsu, Ltd., et al.		Ø	
AA		JP 03-152775	06-28-1991	Hitachi, Ltd.		8	
		JP 11-031368	02-02-1999	Fujitsu, Ltd.		Ø	
#L		JP 06-187624	07-08-1994	Fujitsu, Ltd.		図	
AL		JP 07-300397	11-14-1995	Matsushita Elec. Ind. Co., Ltd.		Ø	
JH.		JP 05-325274	12-10-1993	Canon, Inc.		Ø	
XX		WO 98/44488 A1	10-08-1998	Seagate Technology, Inc.		×	

Examiner Signature	GEORGE	LETSCHER	Date Considered	/21/	05
	·				

[&]quot;EXAMPIER: Initial If reference considered, whether or not cluston is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next consumerization to Applicant.

Applicant's unique cluston designation number (optional).

See Kind Codes of USPTO Patent Documents at www.usinto.com/ or MPEP 901.04.

Plots Office that issued the document, by the bro-letter code (WIPO Standard SL3).

For Japanese patent documents, the indicates of the year of the reign of the Emperor must precede the serial number of the patent document.

**Nond of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

**Apolicant is to place a check mark here if English language translations to attached.

The collection of Information is required by 37 CTR 1.97 and 1.98. The Information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including pathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for resisting this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commence, P.O. Bex 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED POINTS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Bex 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-600-PTO-9199 (1-600-786-9199) and select option 2.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

SHEET 2 of 2

Application retitions	10/705,235
Filing Date	November 10, 2003
First Named Inventor	Hideki Kuwajima, et al.
Art Unit	2052-2653
Examiner Name	TO BU ASSISTED Letscher
Attorney Docket No.	YAO-4337US4

Do	NOT
PR	INT

	NON-PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T²		
#		Australian Search Report dated October 31, 2003 (SG 200100498-5).			
		·			
	·				
			۵		

	· -				,
Examiner	GINGE	1	Date	$\overline{1}$	1
Signature	10-COK GC	G /SCHEK	Considered	ロン	105
			Considered		/~/

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through diation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

*Applicant's unique diation designation number (optional).

*Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**If you need assistance in complete the form cell 1-800-875-9199) and celect certics 2.

Substitute for Ser 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

SHEET 1 of 2

Complete if Known				
Application Number	10/705,325			
Filing Date	November 10, 2003			
First Named Inventor	Hideki Kuwajima, et al.			
Art Unit	2002-2653	_		
Examiner Name	To Bo Assigned LLTS Char			
Attorney Docket No.	YAO-4337US4			

	U.S. PATENT DOCUMENTS						
		Document Number			Pages, Columns, Lines, Where		
Examiner Initials*	Ote No.1	Number - Kind Code ^{2 (if known)}	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Relevant Passages or Relevant Figures Appear		
-		US-					
		US-					
		US-					
		US-					
		US-			·		
		US-					
		US-					
		US-					
		US-					
_		US-					
		US-					
		US-					
		US-					
		US-					

	FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (IT Innown)	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T°	
No		WO 98/19304 A1	05-07-1998	TDK Corp.	Entire Document		
H		WO 98/27547 A	06-25-1998	Seagate Technology, Inc.	Entire Document	0	
H		WO 99/01901 A1	01-14-1999	Kabushiki Kaisha Tokai Rika Denki Seisakusho	Entire Document		
H		EP 591885 B1	01-28-1998	Matsushita Electric Industrial Co., Ltd.	Entire Document		
	ŀ						

Examiner	CODC	1	Date	0/01	
Signature	I GERKGE.	LETSCHER	Considered	12121	10)5
			Considered	1-1	100
				, .	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

dered. Include copy or this form with mext communications to Applicable.

*Applicant's unique distition designation number (optional).

*See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

*Enter Office that issued the document, by the two-letter code (WIPO Standard St.3).

*For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

*Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

*Applicant is to place a cheek mark here if Enriksh language translation is attached.

^{*}Nind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

*Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The Information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

	Substitute for Form 1449B/PTO	Complete if Known				
		Application Number	To-Bo-Assigned 0 705, 235			
	INFORMATION DISCLOSURE	Filing Date	Herewith .			
	STATEMENT BY APPLICANT	First Named Inventor	Hideki Kuwajima, et al.			
	(Use as many sheets as necessary)	Art Unit	To Be Assigned 2653			
_		Examiner Name	To Be Assigned Let Scher			
	SHEET 2 of 2	Attorney Docket No.	YAO-4337US4			

-	NOT	_

. :

		NON-PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T 2
XI)		Chinese Office Action dated June 27, 2003.	0
			0
			0

Examiner				
Signature	GEORGE	LETSCHER	Date	2/21/20
Signottire	1 601196	LC TOTIES	Considered	421103

"EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Applicant's unique citation designation number (optional).

Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Tradenark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

INFORMATION DISCLOSURE

Substitute for Form 1449A/PTO

STATEMENT BY APPLICANT (Use as many sheets as necessary)

SHEET 1 of 2

	<u>·</u>					
Complete if Known						
Application Number	To Bo Assigned 10 705 235					
Filing Date	Herewith					
First Named Inventor	Hideki Kuwajima, et al.					
Art Unit	To Be Assigned 2653					
Examiner Name	To Be Assigned Let Scher					
Attorney Docket No.	YAO-4337US4					

			U.S. PATENT	OCUMENTS	
Evantara	C12-	Document Number			Pages, Columns, Lines, Where
Examiner Initials*	Cite No.1	Number - Kind Code ² (if known)	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
XI		US-5,898,544	04-27-1999	Krinke, et al.	3
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-		<u> </u>	

		FOREIGN PA	TENT DOCUMEN	TS		
Examiner	Cite	Foreign Patent Document	Dibliophics Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant	\prod
Initials	No.1	Country Code ³ - Number ⁴ - Kind Code ⁵ (If known)	Publication Date (MM-DD-YYYY)	Applicant of Cited. Document	Passages or Relevant Figures Appear	Té
A	⊢–	JP 5-47126	02-26-1993	Fujitsu, Ltd.		Ø
XD.		JP 9-265738	10-07-1997	Hitachi, Ltd.		×
At,	<u> </u>	JP 10-134534	05-22-1998	Hitachi, Ltd.		X
117		JP 10-269732	10-09-1998	NEC Corp.		X
-		JP 10-293979	11-04-1998	Fujitsu, Ltd., et al.		X
A.L.	<u> </u>	JP 03-152775	06-28-1991	Hitachi, Ltd.		X
	<u> </u>	JP 11-031368	02-02-1999	Fujitsu, Ltd.		X
XX		JP 06-187624	07-08-1994	Fujitsu, Ltd.		
H		JP 07-300397	11-14-1995	Matsushita Elec. Ind. Co., Ltd.		X
#/		JP 05-325274	12-10-1993	Canon, Inc.		Ø
X		WO 98/44488 A1	10-08-1998	Seagate Technology, Inc.		X

Examiner C 200 / F - Editor				
Signature GEORGE LETSCHER	Date Considered	2/2/	105	• }
	Considered	$\frac{7}{7}$	/ • •	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

[&]quot;EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

\[
\text{Applicant's unique citation designation number (optional).}
\]
\[
\text{Sec Kind Codes of USPTO Patent Documents at \text{\text{wrw.uspto.gov}} \text{ or MPEP 901.04.}
\]
\[
\text{Set Kind Codes of USPTO Patent Documents at \text{\text{\text{wrw.uspto.gov}}} \text{ or MPEP 901.04.}
\]
\[
\text{The Inter Office that issued the document, by the two-letter code (WIPO Standard St.3).}
\]
\[
\text{Tor Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.
\]
\[
\text{SkInd of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.
\]
\[
\text{Nonlinear of Information is required by 37 CFR 1.97 and 1.98.} \]
\[
\text{The collection of information is required by 37 CFR 1.97 and 1.98.} \]
\[
\text{The collection of information is required by 37 CFR 1.97 and 1.98.} \]
\[
\text{The collection of information is required by 37 CFR 1.97 and 1.98.} \]
\[
\text{The collection of information is required by 37 CFR 1.97 and 1.98.} \]
\[
\text{The collection of information is required by 37 CFR 1.97 and 1.98.} \]
\[
\text{The collection of information is required by 37 CFR 1.97 and 1.98.} \]
\[
\text{The collection of information is required by 37 CFR 1.97 and 1.98.} \]
\[
\text{The collection of information is required by 37 CFR 1.97 and 1.98.} \]
\[
\text{The collection of information is required by 37 CFR 1.97 and 1.98.} \]
\[
\text{The collection of information is required by 37 CFR 1.97 and 1.98.} \]
\[
\text{The collection of information is required by 37 CFR 1.97 and 1.98.} \]
\[
\text{The collection of information is extinated to the collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete dapplicati